

H5
LB
PATENT
Customer No. 22,852
Attorney Docket No. 08647.0002-00000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

JAN 09 2002

TECH CENTER 1600/2900

In re Application of:)

Joseph P. STEINER et al.)

) Group Art Unit: 1621

Application No.: 09/805,249)

) Examiner: Not Yet Assigned

Filed: March 14, 2001)

For: ROTAMASE ENZYME ACTIVITY)
INHIBITORS)

Commissioner for Patents and Trademarks
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents are attached.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

English abstracts of the non-English documents are enclosed.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.


Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against any claim of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: January 7, 2002

By: 
William L. Strauss
Reg. No. 47,114

220732-1

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

INFORMATION DISCLOSURE CITATION

RECEIVED

Atty. Docket No. 08647.0002	Serial No. 09/805,249	JAN 09 2002
Applicant Joseph P. STEINER et al.		
Filing Date June 5, 2001	Group: 1621	TECH CENTER 1600/2900

U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
01P	3,810,884	05/14/1974	Gold	260	239	
JAN 07 2002	3,917,840	11/04/1975	Gold	424	267	
PATENT & TRADEMARK OFFICE	4,668,798	05/26/1987	Kim	548	533	
	5,002,963	03/26/1991	De Luca et al.	514	419	
	5,128,483	07/07/1992	Trybulski et al.	548	531	
	5,147,877	09/15/1992	Goulet	514	291	
	5,192,773	03/09/1993	Armistead et al.	514	315	
	5,227,467	07/13/1993	Durette et al.	530	321	
	5,235,066	08/10/1993	Askin et al.	548	406	
	5,252,579	10/12/1993	Skotnicki et al.	514	291	
	5,321,009	06/14/1994	Baeder et al.	514	4	
	5,330,993	07/19/1994	Armistead et al.	514	330	
	5,385,908	01/31/1995	Nelson et al.	514	291	
	5,385,918	01/31/1995	Connell et al.	514	330	
	5,444,042	08/22/1995	Bartus et al.	514	2	
	5,447,915	09/05/1995	Schreiber et al.	514	18	
	5,453,437	09/26/1995	Schohe et al.	514	424	
	5,516,797	05/14/1996	Armistead et al.	514	548	
	5,527,907	06/18/1996	Or et al.	540	456	
	5,530,121	06/25/1996	Kao et al.	540	456	
	5,541,189	07/30/1996	Luly et al.	514	291	
	5,541,191	07/30/1996	Skotnicki et al.	514	291	
	5,541,192	07/30/1996	Skotnicki et al.	514	291	
	5,543,423	08/06/1996	Zelle et al.	514	332	
	5,589,499	12/31/1996	Weth	514	423	
	5,599,927	02/04/1997	Or et al.	540	456	
	5,604,294	02/18/1997	Luly et al.	540	456	

INFORMATION DISCLOSURE CITATION

RECEIVED

Atty. Docket No. 08647.0002	Serial No. 09/805,249	JAN 09 2002
Applicant Joseph P. STEINER et al.		
Filing Date June 5, 2001	Group: 1621	TECH CENTER 1600/2900

U.S. PATENT DOCUMENTS

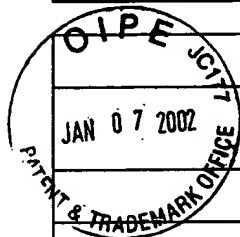
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	5,614,547	03/25/1997	Hamilton et al.	514	423	
	5,620,971	04/15/1997	Armistead et al.	514	212	
	5,621,108	04/15/1997	Smith, III et al.	546	207	
	5,654,332	08/05/1997	Armistead	514	533	
	5,798,355	08/25/1998	Steiner et al.	514	248	
	5,898,029	04/27/1999	Lyons et al.	514	12	
	6,037,370	03/14/2000	Armistead	514	533	

FOREIGN PATENT DOCUMENTS

Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
0 048 159 A2	03/24/1982	Europe			
0 088 350 A1	09/14/1983	Europe			
0 405 994 A2	01/02/1991	Europe			
0 378 318 A1	07/18/1990	Europe			
0 564 924 A2	10/13/1993	Europe			
2 247 456 A	03/04/1992	United Kingdom			
DE 40 15 255 A1	11/14/1991	Germany			No, Canadian Counterpart (English)
DE 44 25 950 A1	01/25/1996	Germany			No, English Abstract
WO 88/09789	12/15/1988	WIPO			
WO 91/13088	09/05/1991	WIPO			
WO 92/00278	01/09/1992	WIPO			
WO 92/04370	03/19/1992	WIPO			
WO 92/18478	10/29/1992	WIPO			
WO 92/19593	11/12/1992	WIPO			
WO 92/19745	11/12/1992	WIPO			
WO 92/21313	12/10/1992	WIPO			

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621



FOREIGN PATENT DOCUMENTS

	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
	WO 93/07269	04/15/1993	WIPO			
	WO 93/23548	11/25/1993	WIPO			
	WO 93/25546	12/23/1993	WIPO			
	WO 94/07858	04/14/1994	WIPO			
	WO 95/26337	10/05/1995	WIPO			
	WO 96/06097	02/29/1996	WIPO			
	5 024 7/91	11/13/1991	Canada			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Holt et al., "Structure-Activity Studies of Synthetic FKBP Ligands as Peptidyl-prolyl Isomerase Inhibitors", Bioorganic and Medicinal Chemistry Letters, Vol. 4, No. 2, pp. 315-320, 1994.
	Yamashita et al., "Design, Synthesis and Evaluation of Dual Domain FKBP Ligands", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 2, pp. 325-328, 1994.
	Yamamoto et al., "Stimulation of Hair Growth by Topical Application of FK506, a Potent Immunosuppressive Agent", Journal of Investigative Dermatology, Vol. 102, No. 2, pp. 160-164, 1994.
	Wang et al., "Synthesis and FKBP Binding of Small Molecule Mimics of the Tricarbonyl Region on FK506", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 9, pp. 1161-1166, 1994.
	Steffan et al., "Base Catalyzed Degradations of Rapamycin", Tetrahedron Letters, Vol. 34, No. 23, pp. 3699-3702, 1993.
	Steiner et al., "High Brain Densities of the Immunophilin FKBP Colocalized with Calcineurin", Nature, Vol. 358, pp. 584-586, 1992.
	Stocks et al., "Macrocyclic Ring Closures Employing the Intramolecular Heck Reaction", Tetrahedron Letters, Vol. 36, No. 36, pp. 6555-6558, 1995.
	Stocks et al., "The Contribution to Binding of the Pyranoside Substituents in the Excised Binding Domain of FK-506", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 12, pp. 1457-1460, 1994.
	Tanaka et al., "Structure of FK506: A Novel Immunosuppressant Isolated from Streptomyces", J. Am. Chem. Soc., 109, pp. 5031-5033, 1987.
	Tatlock et al., "High-Affinity FKBP-12 Ligands Derived from (R)-(-)-Carvone. Synthesis and Evaluation of FK506 Pyranose Ring Replacements", Bioorganic & Medicinal Chemistry Letters, Vol. 5, No. 21, pp. 2489-2494, 1995.
	Teague et al., "The Affinity of the Excised Binding Domain of FK-506 for the Immunophilin FKBP12", Bioorganic & Medicinal Chemistry Letters, Vol. 3, No. 10, pp. 1947-1950, 1993.

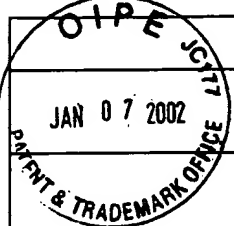
INFORMATION DISCLOSURE CITATION

RECEIVED

JAN 09 2002


TECH CENTER 1600/2900

Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Teague et al., "Synthesis of FK506-Cyclosporin Hybrid Macrocycles", Bioorganic & Medicinal Chemistry Letters, Vol. 5, No. 20, pp. 2341-2346, 1995.
	Teague et al., "Synthesis and Study of a Non Macrocyclic FK506 Derivative", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 13, pp. 1581-1584, 1994.
	Tindall, "Immunointervention with Cyclosporin A in Autoimmune Neurological Disorders", Journal of Autoimmunity, Vol. 5 (Supp. A), pp. 301-313, 1992.
	Tugwell, "Cyclosporin in the Treatment of Rheumatoid Arthritis", Journal of Autoimmunity, Vol. 5 (Supp. A), pp. 231, 240, 1992.
	Snyder et al., "Immunophilins and the Nervous System", Nature Medicine, Vol. 1, No. 1, pp. 32-37, 1995.
	Nakatsuka et al., "Total Synthesis of FK506 and an FKBP Probe Reagent, (C ₈ ,C ₉ - ¹³ C ₂)-FK506", J. Am. Chem. Soc., Vol. 112, No. 14, pp. 5583-5601, 1990.
	Nelson et al., "A Novel Ring Contraction of Rapamycin", Tetrahedron Letters, Vol. 35, No. 41, pp. 7557-7560, 1994.
	Nicolaou et al., "Total Synthesis of Rapamycin", J. Am. Chem. Soc., Vol. 115, No. 10, pp. 4419-4420, 1993.
	Nicolaou et al., "Total Synthesis of Rapamycin", Chem. Eur. J., 1, No. 5, pp. 318-333, 1995.
	Pattenden et al., "Facile Synthesis of the "Tricarbonyl" Subunit in the Immunosuppressant Rapamycin", Tetrahedron Letters, Vol. 34, No. 16, pp. 2677-2680, 1993.
	Rao et al., "Studies Directed Towards the Synthesis of Immunosuppressive Agent FK-506: Synthesis of the Entire Bottom-Half", Tetrahedron Letters, Vol. 32, No. 9, pp. 1251-1254, 1991.
	Rao et al., "Studies Directed Towards the Synthesis of Rapamycin: Stereoselective Synthesis of C-1 to C-15 Segment", Tetrahedron Letters, Vol. 34, No. 44, pp. 7111-7114, 1993.
	Rao et al., "Studies Directed Towards the Synthesis of Immunosuppressive Agent FK-506: Construction of the Tricarbonyl Moiety", Tetrahedron Letters, Vol. 31, No. 10, pp. 1439-1442, 1990.
	Schreiber, "Chemistry and Biology of the Immunophilins and Their Immunosuppressive Ligands", Science, Vol. 251, pp. 283-287, 1991.
	Sharkey et al., "Immunophilins Mediate the Neuroprotective Effects of FK506 in Focal Cerebral Ischaemia", Nature, Vol. 371, pp. 336-339, 1994 (Chemical Abstract attached - Vol. 121, No. 19).
	Skotnicki et al., "Ring Expanded Rapamycin Derivatives", Tetrahedron Letters, Vol. 35, No. 2, pp. 201-202, 1994.
	Skotnicki et al., "Synthesis of Secorapamycin Esters and Amides", Tetrahedron Letters, Vol. 35, No. 2, pp. 197-200, 1994.
	Smith, III et al., "Total Synthesis of Rapamycin and Demethoxyrapamycin", J. Am. Chem. Soc., Vol. 117, No. 19, pp. 5407-5408, 1995.

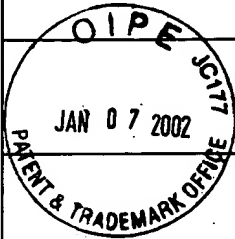
INFORMATION DISCLOSURE CITATION

Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
	Jiang et al.,	"Induction of Anagen in Telogen Mouse Skin by Topical Application of FK506, a Potent Immunosuppressant",	Journal of Investigative Dermatology, Vol. 104, No. 4, pp. 523-525, 1995.
	Jones et al.,	"A Formal Synthesis of FK-506. Exploration of Some Alternatives to Macrolactamization",	J. Org. Chem., Vol. 55, No. 9, pp. 2786-2797, 1990.
	Jones et al.,	"Chemistry of Tricarbonyl Hemiketals and Application of Evans' Technology to the Total Synthesis of the Immunosuppressant (-)-FK-506,	J. Am. Chem. Soc., Vol. 112, No. 8, pp. 2998-3017, 1990.
	Kelly et al.,	"Macrolide Compositions for Treatment of Amyotrophic Lateral Sclerosis",	Chemical Abstracts, Vol. 122, 114965m, p. 659, 1995.
	Kino et al.,	"FK-506, A Novel Immunosuppressant Isolated From a Streptomyces",	Journal of Antibiotics, Vol. XL, No. 9, pp. 1249-1255, 1987.
	Kocienski et al.,	"A Synthesis of the C(1)-C(15) Segment of Tsukubaenolide (FK 506)",	Tetrahedron Letters, Vol. 29, No. 35, pp. 4481-4484, 1988.
	Linde II et al.,	"Straightforward Synthesis of 1,2,3-Tricarbonyl Systems",	J. Org. Chem., Vol. 56, No. 7, pp. 2534-2538, 1991.
	Luengo et al.,	"Efficient Removal of Pipecolinate from Rapamycin and FK506 by Reaction with $n\text{-Bu}_4\text{N}^+\text{CN}^-$ ",	Tetrahedron Letters, Vol. 34, No. 29, pp. 4599-4602, 1993.
	Luengo et al.,	"Synthesis and Structure-Activity Relationships of Macrocyclic FKBP Ligands",	Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 2, pp. 321-324, 1994.
	Luengo et al.,	"Studies on the Chemistry of Rapamycin: Novel Transformations under Lewis-Acid Catalysis",	Tetrahedron Letters, Vol. 34, No. 6, pp. 991-994, 1993.
	Luengo et al.,	"Structure-Activity Studies of Rapamycin Analogs: Evidence that the C-7 Methoxy Group is Part of the Effector Domain and Positioned at the FKBP12-FRAP Interface",	Chemistry and Biology, Vol. 2, No. 7, pp. 471-481, 1995.
	Lyons et al.,	"Neuronal Regeneration Enhances the Expression of the Immunophilin FKBP-12",	Journal of Neuroscience, pp. 2985-2994, 1995.
	Munegumi et al.,	"Diastereoselective Catalytic Hydrogenation of N^α Pyruvoyl-(S)-prolinamide",	Bull. Chem. Soc. Jpn., Vol. 63, No. 6, pp. 1832-1834, 1990.
	Hayward et al.,	"An Application of the Suarez Reaction to the Regiospecific and Stereospecific Synthesis of the $\text{C}_{28}\text{-C}_{42}$ Segment of Rapamycin",	pp. 3989-3992, 1993.
	Holt et al.,	"Structure-Activity Studies of Nonmacrocyclic Rapamycin Derivatives",	Bioorganic & Medicinal Chemistry Letters, Vol. 3, No. 10, pp. 1977-1980, 1993.
	Holt et al.,	"Design, Synthesis, and Kinetic Evaluation of High-Affinity FKBP Ligands and the X-ray Crystal Structures of Their Complexes with FKBP12",	J. Am. Chem. Soc., Vol. 115, No. 22, pp. 9925-9938, 1993.

INFORMATION DISCLOSURE CITATION


Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Horvath et al., "An Application of the Evans-Prasad 1,3-Syn Diol Synthesis to a Stereospecific Synthesis of the C ₁₀ -C ₂₇ Segment of Rapamycin", Tetrahedron Letters, Vol. 34, No. 25, pp. 3993-3996, 1993.
	Iwabuchi et al., "Effects of Immunosuppressive Peptidyl-Prolyl <i>cis-trans</i> Isomerase (PPlase) Inhibitors, Cyclosporin A, FK506, Ascomycin and Rapamycin, on Hair Growth Initiation in Mouse: Immunosuppression is Not Required for New Hair Growth", Journal of Dermatological Science, 9, pp. 64-69, 1995.
	Hayward et al., "Total Synthesis of Rapamycin via a Novel Titanium-Mediated Aldol Macrocyclization Reaction", J. Am. Chem. Soc., Vol. 115, No. 20, pp. 9345-9346, 1993.
	Goulet et al., "Construction of an FK-506 Analog From Rapamycin-Derived Materials", Tetrahedron Letters, Vol. 32, No. 36, pp. 4627-4630, 1991.
	Goulet et al., "Degradative Studies on the Tricarbonyl Containing Macrolide Rapamycin", Tetrahedron Letters, Vol. 31, No. 34, pp. 4845-4848, 1990.
	Harding et al., "A Receptor for the Immunosuppressant FK506 is a <i>cis-trans</i> Peptidyl-Prolyl Isomerase", Nature, Vol. 341, pp. 758-760, 1989.
	Hauske et al., "Design and Synthesis of Novel FKBP Inhibitors", J. Med. Chem. 1992, Vol. 35, No. 23, pp. 4284-4296, 1992.
	Hauske et al., "Investigation of the Effects of Synthetic, Non-Cytotoxic Immunophilin Inhibitors on MDR", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 17, pp. 2097-2102, 1994.
	Gold et al., "The Immunosuppressant FK506 Increases Functional Recovery and Nerve Regeneration Following Peripheral Nerve Injury", Restorative Neurology and Neuroscience, 6, pp. 287-296, 1994.
	Askin et al., "Chemistry of FK-506: Benzilic Acid Rearrangement of the Tricarbonyl System", Tetrahedron Letters, Vol. 30, No. 6, pp. 671-674, 1989.
	Askin et al., "Efficient Degradation of FK-506 to a Versatile Synthetic Intermediate", J. Org. Chem., Vol. 55, No. 20, pp. 5451-5454, 1990.
	Baumann et al., "Synthesis and Oxidative Cleavage of the Major Equilibrium Products of Ascomycin and FK 506", Tetrahedron Letters, Vol. 36, No. 13, pp. 2231-2234, 1995.
	Bycroft et al., "Efficient Asymmetric Synthesis of α -Amino Acids from α -Keto Acids and Ammonia with Conservation of the Chiral Reagent", J.C.S. Chem. Comm., pp. 988-989, 1975.
	Birkenshaw et al., "Synthetic FKBP12 Ligands. Design and Synthesis of Pyranose Replacements", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 21, pp. 2501-2506, 1994.
	Boulmedais et al., "Stereochemie de la Reduction Electrochimique d' α -cetoamides Optiquement Actives II. Electroreduction de Benzoylformamides Derives de la S(-)-proline", Bulletin de la Societe Chimique de France, 9, No. 2, pp. 185-191, 1988.
	Caffrey et al., "Synthesis and Evaluation of Dual Domain Macrocyclic FKBP12 Ligands", Bioorganic & Medicinal Chemistry Letters, Vol. 4, No. 21, pp. 2507-2510, 1994.

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621


OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Cameron et al., "Immunophilin FK506 Binding Protein Associated with Inositol 1,4,5-trisphosphate Receptor Modulates Calcium Flux", Proc. Natl. Acad. Sci., Vol. 92, pp. 1784-1788, 1995.
	Caufield et al., "Macrocyclic Immunomodulators", Annual Reports in Methonal Chemistry, 25, Chapter 21, pp. 195-204, 1989.
	Chakraborty et al., "Design and Synthesis of a Rapamycin-Based High Affinity Binding FKBP12 Ligand", Chemistry & Biology, Vol. 2, pp. 157-161, 1995.
	Coleman et al., "Degradation and Manipulations of the Immunosuppressant FK506: Preparation of Potential Synthetic Intermediates", Heterocycles, Vol. 28, No. 1, pp. 157-161, 1989.
	Dawson et al., "The Immunophilins, FK506 Binding Protein and Cyclophilin, are Discretely Localized in the Brain: Relationship to Calcineurin", Neuroscience, Vol. 62, No. 2, pp. 569-580, 1994.
	Dawson et al., "Immunosuppressant FK506 Enhances Phosphorylation of Nitric Oxide Synthase and Protects Against Glutamate Neurotoxicity", Proc. Natl. Acad. Sci., Vol. 90, pp. 9808-9812, 1993.
	Dumont et al., "The Immunosuppressive and Toxic Effects of FK-506 are Mechanistically Related: Pharmacology of a Novel Antagonist of FK-506 and Rapamycin", J. Exp. Med., Vol. 176, pp. 751-760, 1992.
	Egbertson et al., "Synthetic Route to the 'Tricarbonyl' Region of FK-506", J. Org. Chem., 54, pp. 11-12, 1989.
	Feutren, "The Optimal Use of Cyclosporin A in Autoimmune Diseases", Journal of Autoimmunity, 5 (Supp. A), pp. 183-195, 1992.
	Finberg et al., "Prevention of HIV-1 Infection and Preservation of CD4 Function by the Binding of CPFs to gp120", Science, Vol. 249, pp. 287-291, 1990.
	Fisher et al., "On the Remarkable Propensity for Carbon-Carbon Bond Cleavage Reactions in the C ₈ -C ₁₀ Region of FK-506", J. Org. Chem. 56, pp. 2900-2907, 1991.
	Fry, "Psoriasis: Immunopathology and Long-Term Treatment with Cyclosporin", Journal of Autoimmunity, 5 (Supp. A), pp. 277-283, 1992.
	Farber, "FKBP12-Ligand-Calcineurin Interactions: Analogues of SBL506", J. Am. Chem. Soc., Vol. 117, No. 27, pp. 7267-7268, 1995.
	Furber et al., "Studies Relating to the Immunosuppressive Activity of FK506", Tetrahedron Letters, Vol. 34, No. 8, pp. 1351-1354, 1993.
	Armistead et al., "Design, Synthesis and Structure of Non-Macrocyclic Inhibitors of FKBP12, the Major Binding Protein for the Immunosuppressant FK506", Acta Cryst., D51, pp. 522-528, 1995.
	Andrus et al., "Structure-Based Design of an Acyclic Ligand That Bridges FKBP12 and Calcineurin", J. Am. Chem. Soc., Vol. 115, No. 22, pp. 10420-10421, 1993.
	Yohannes et al., "Degradation of Rapamycin: Retrieval of Major Intact Subunits", Tetrahedron Letters, Vol. 33, No. 49, pp. 7469-7472, 1992.

INFORMATION DISCLOSURE CITATION

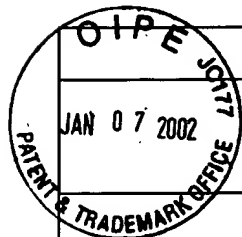
Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Yohannes et al., "Degradation of Rapamycin: Synthesis of a Rapamycin Derived Fragment Containing the Tricarbonyl and Triene Sectors", Tetrahedron Letters, Vol. 34, pp. 2075-2078, 1993.
	Williams et al., "Synthesis of the α,β -Diketo Amide Segment of the Novel Immunosuppressive FK506", J. Org. Chem., Vol. 53, No. 19, pp. 4643-4644, 1988.
	Wasserman et al., "Synthesis of the 'Tricarbonyl' Region of FK-506 Through an Amidophosphorane", J. Org. Chem., Vol. 54, No. 12, pp. 2785-2786, 1989.
	Waldmann, "Amino Acid Esters as Chiral Auxiliaries in Barbier-Type Reactions in Aqueous Solution", Liebigs Ann. Chem., pp. 1317-1322, 1991.
	Mashkouskii et al., "1-[4-(2-Hydroxy-3-tert-butylaminopropoxy)-indole-3-yl (5-acetamido-1-(s)-carboxypentyl)-DL-alanyl]-L-proline dihydrochloride, a new angiotensin-converting enzyme inhibitor with β -adrenoblocking properties," Khim.-Farm. Zh., 1993, 27(10), 16-20. (Russian)
	Baader et al., "Inhibition of prolyl 4-hydroxylase by oxalyl amino acid derivatives in vitro, in isolated microsomes and in embryonic chicken tissues," Biochem. J., 300, 525-530, 1994.
	Goodfellow et al., "p-Nitrophenyl 3-Diazopyruvate and Diazopyruvamides, a New Family of Photoactivatable Cross-Linking Bioprobes," Biochemistry, Vol. 28, No. 15, pp. 6346-6360, 1989.
	Soai et al., "Diastereoselective Reduction of Chiral α -Ketoamides Derived from (S)-Proline Esters with Sodium Borohydride. Preparation of Optically Active α -Hydroxy Acids," J. Chem. Soc. Perkin Trans., pp. 769-772, 1985.
	Munegumi et al., "Asymmetric Catalytic Hydrogenations of N-Pyruvoyl-(S)-proline Esters," Bull. Chem. Soc. Jpn., 60, pp. 249-253, 1987.
	Teichner et al., "Treatment with Cyclosporine A Promotes Axonal Regeneration in Rats Submitted to Transverse Section of the Spinal Cord," J. Hirnforsch., Vol. 34, No. 3, pp. 343-349, 1993.
	Somers et al., "Synthesis and Analysis of 506BD, a High-Affinity Ligand for the Immunophilin FKBP," J. Am. Chem. Soc., Vol. 113, pp. 8045-8056, 1991.
	Shiga et al., "Cyclosporin A protects against ischemia-reperfusion injury in the brain," Brain Research, Vol. 595, pp. 145-148, 1992.
	Ryba et al., "Cyclosporine A Prevents Neurological Deterioration of Patients with SAH - A Preliminary Report," Acta Neurochir., Vol. 112, pp. 25-27, 1991.
	Ocain et al., "A Nonimmunosuppressive Triene-Modified Rapamycin Analog Is A Potent Inhibitor of Peptidyl Prolyl Cis-Trans Isomerase," Biochem. Biophys. Res. Comm., Vol. 192, No. 3, pp. 1340-1346, 1993.
	Williams et al., "Synthesis of the α, β -Diketo Amide Segment of the Novel Immunosuppressive FK506," J. Org. Chem., Vol. 53, pp. 4643-4644, 1988.
	Lyons et al., "Immunosuppressant FK506 promotes neurite outgrowth in cultures of PC 12 cells and sensory ganglia," Proc. Natl. Acad. Sci. USA, Vol. 91, pp. 3191-3195, 1994.

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	08647.0002	Serial No.	09/805,249
Applicant	Joseph P. STEINER et al.		
Filing Date	June 5, 2001	Group:	1621



OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Kitamura et al., "Suppressive effect of FK-506, a novel immunosuppressant, against MPTP-induced dopamine depletion in the striatum of young C57BL/6 mice," J. Neuroimmunology, Vol. 50, pp. 221-224, 1994.
	Effenberger et al., "Diastereoselective Addition of Benzenesulfonyl Chloride to 1-Acryloylproline Esters," Chem. Ber., Vol. 122, pp. 545-551, 1989.
Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
Form PTO 1449	Patent and Trademark Office - U.S. Department of Commerce